

**Supplementary Table 1.** NCBI database annotation information about *greA* gene of each *Staphylococcus aureus* strains

No.	Genome accession No.	Protein accession No.	Gene name	Bacterial taxonomy	Strain No.
1	CP065857.1	QPV65454.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	CC1153-MRSA
2	CP032161.1	QOE19269.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	SA H27
3	CP053101.1	QJR42020.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	EDCC5398
4	CP033117.1	QFZ04969.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	Zhenghai
5	CP035101.1	QCY30254.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	ATCC 12600
6	CP039156.1	QBZ85874.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	WCUH29
7	CP035670.1	QBB16477.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	VB9352
8	CP034349.1	AZL91607.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	80wphwpl
9	CP009681.1	AIU84634.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	Gv69
10	FFZR01000002.1	CXK22744.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	st502
11	FGBJ01000004.1	CXL59646.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	st676
12	FHAD01000001.1	CYC13506.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	st3125
13	CSIK01000003.1	CPD51867.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	USFL308
14	CSBH01000002.1	COW80319.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	USFL206
15	CABFMG010000020.1	VTY30692.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	BgEED30
16	CP003045.1	AFH69850.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	71193
17	AIDT01000001.1	EIA15394.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	DR10
18	AP017922.1	BBA24254.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	JP080
19	CP054876.1	QKV60182.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	Dresden-275757
20	CP062279.1	QOJ76193.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	MVF-7
21	CP032160.1	QOE85244.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	SA G5
22	CP032468.1	QOE21758.1	<i>GreA</i>	<i>Staphylococcus aureus</i>	SA H29